Remarks

The Office Action mailed July 8, 2004 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-21 are pending in this application. Claims 1-21 stand rejected.

In accordance with 37 C.F.R. 1.136(a), a two month extension of time is submitted herewith to extend the due date of the response to the Office Action dated July 8, 2004, for the above-identified patent application from October 8, 2004, through and including December 8, 2004. In accordance with 37 C.F.R. 1.17(a)(3), authorization to charge a deposit account in the amount of $430.00 to cover this extension of time request also is submitted herewith.

The rejection of Claims 1-5, 9-13, 15, and 18 under 35 U.S.C. § 103(a) as being unpatentable over Melchione et al. (U.S. Patent No. 5,930,764) ("Melchione") in view of Pham et al. (U.S. Patent No. 5,970,482) ("Pham") and further in view of David M. Kroenke, *Database Processing Fundamentals, Design, and Implementation*, Seventh Ed. (2000) ("Kroenke") is respectfully traversed.

Applicants respectfully submit that the none of Melchione, Pham, or Kroenke, describe or suggest the claimed invention. As discussed below, none of Melchione, Pham, or Kroenke, considered alone or in combination, describe or suggest a method for increasing efficiency of a marketing system that includes building models of predicted customer profiles including risk models, attrition models, and profitability models, wherein each model is a statistical analysis for predicting a behavior of a prospective customer, a risk model predicts a likelihood of whether the prospective customer will at least one of pay on time, be delinquent with a payment, and declare bankruptcy, an attrition model predicts a likelihood of whether the prospective customer will remain a customer or become a customer of a competitor, and a profitability model predicts a net present value of the prospective customer.

Moreover, Applicants respectfully submit that the none of Melchione, Pham, or Kroenke, alone or in combination, describe or suggest a method that includes using the online analytical

processing tool and the customer demographic data to analyze a combination of the models wherein each model combination includes a risk model, an attrition model, and a profitability model.

Furthermore, Applicants respectfully submit that the none of Melchione, Pham, or Kroenke, alone or in combination, describe or suggest using an online analytical processing tool and customer demographic data to analyze a combination of models, determining a sequential order for combining the models prior to combining the models based on the model combination analysis performed by the online analytical processing tool, and using the online analytical processing tool to combine the models in the determined sequential order, which includes defining a target group of prospective customers from a plurality of prospective customers stored in a database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

More specifically, none of Melchione, Pham, or Kroenke, considered alone or in combination, describe or suggest using the online analytical processing tool to combine the models in the determined sequential order, which includes defining a target group of prospective customers from a plurality of prospective customers stored in a database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

In fact, the Office Action clearly states at pages 5 and 6 that "Neither Melchione nor Pham specifically disclose: using the online analytical processing tool and the customer demographic data to analyze a combination of models; determining a sequential order for combining the models prior to combining the models based on the model combination analysis performed by the online analytical processing tool; using the online analytical processing tool to combine the models in the determined sequential order."

Applicants also submit that Kroenke is non-analogous art that is not relevant to the present patent application. More specifically, Kroenke describes a way of presenting information that is called On Line Analytical Processing (OLAP). In other words, Kroenke merely describes a way of presenting information stored within a database. Although Kroenke mentions using an OLAP for displaying information including "slices" (a dimension is held constant) data, Kroenke does not address issues related to increasing the efficiency of a marketing system. Moreover, in contrast to what is suggested by the Office Action, the "slices" of data referred to in Kroenke do not describe or teach building models of predicted customer profiles wherein each model is a statistical analysis for predicting a behavior of a prospective customer. A "slice" of data does not teach a statistical analysis for predicting a behavior of a prospective customer.

In addition, even assuming, arguendo, that Kroenke is analogous art, Applicants submit that Kroenke does not describe or teach combining the models (i.e., a statistical analysis for predicting a behavior of a prospective customer) in the determined sequential order as recited in the present claims. Although the Office Action suggests that Kroenke discusses "OLAP tools, and discloses multi-dimensional slices i.e. models, organizing i.e. sequencing, the data according to a specified ranking, and combining the models into various view definitions to derive analytical conclusions", Kroenke does not describe or teach combining the models in the determined sequential order as recited in the present claims. Rather, Kroenke describes, on page 387 and in Figure 14-13, two cubes configured one behind the other displaying "slices" (i.e., dimensions that are held constant) of data. Thus, in the example shown in Kroenke, the slices of data include single family dwellings and condos. In other words, Kroenke describes a method of displaying multiple "slices" of data for a user, and does not describe or teach combining models (i.e., a statistical analysis for predicting a behavior of a prospective customer) in a determined sequential order, which includes defining a target group of prospective customers from a plurality of prospective customers stored in a database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

Melchione describes a sales process support system and a method for identifying sales targets using a centralized database (10). Central database (10) receives information from a variety of internal and external feeds (21-25), and standardizes and households the information in a three-level hierarchy, including households, customers, and accounts, for use by a financial institution. The information stored on central database (10) is accessed through micromarketing workstations (12) to generate lists of sales leads for marketing campaigns. A database engine (40) is provided for accessing data on central database (10). Contact strategy models are used to identify and target sales leads for each sales campaign. The system distributes sales leads electronically to branch networks, where the sales leads are used to target customers for marketing campaigns.

Pham describes a data mining system (3000) that includes a study manager (3010), a knowledge model engine (3070) coupled to study manager (3010), a discovery manager (3020) coupled to knowledge model engine (3070), an evaluation manager (3030) coupled to knowledge model engine (3070), and a prediction manager (3040) coupled to knowledge model engine (3070). System (3000) permits discovery, evaluation, and prediction of the correlative factors of data, i.e., the conjunctions, as corresponding to neuroexpressions (a semantic connection of neuroagents) connected to an output neuroagent that corresponds to the data output.

Kroenke describes a new way of presenting information that is called On Line Analytical Processing (OLAP). With OLAP, data is viewed in the frame of a table, or with three axes, in that of a cube. OLAP makes no limit on the number of axes, which is sometimes referred to as an OLAP hypercube. A "dimension" refers to a feature of the data to be placed on an axis. The cells of the cube represent the "measures" of the cube, or the data that is to be displayed. Dimensions that are held constant in a cube are called "slices". The values of a dimension are called "members".

Claim 1 recites a method for increasing efficiency of a marketing system that includes a database containing a plurality of prospective customers and customer demographic data, the method includes "building models of predicted customer profiles, the models include risk models, attrition models, and profitability models, each model is a statistical analysis for

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predicting a behavior of a prospective customer, wherein a risk model predicts a likelihood of whether the prospective customer will at least one of pay on time, be delinquent with a payment, and declare bankruptcy, an attrition model predicts a likelihood of whether the prospective customer will remain a customer or become a customer of a competitor, a profitability model predicts a net present value of the prospective customer...embedding the models within an online analytical processing tool...using the online analytical processing tool and the customer demographic data to analyze a combination of the models, each model combination includes a risk model, an attrition model, and a profitability model...determining a sequential order for combining the models prior to combining the models based on the model combination analysis performed by the online analytical processing tool...using the online analytical processing tool to combine the models in the determined sequential order, wherein combining the models in the determined sequential order includes defining a target group of prospective customers from the plurality of prospective customers stored in the database, the target group including a list of prospective customers satisfying each of the combined models, the determined sequential order maximizes a number of prospective customers included within the target group...and generating scores for a prospective customer included within the target group based on the predicted customer profiles wherein the online analytical processing tool generates the scores by combining the models in the determined sequential order."

None of Melchione, Pham, or Kroenke, considered alone or in combination, describe or suggest a method for increasing efficiency of a marketing system that includes building models of predicted customer profiles including risk models, attrition models, and profitability models, wherein each model is a statistical analysis for predicting a behavior of a prospective customer, a risk model predicts a likelihood of whether the prospective customer will at least one of pay on time, be delinquent with a payment, and declare bankruptcy, an attrition model predicts a likelihood of whether the prospective customer will remain a customer or become a customer of a competitor, and a profitability model predicts a net present value of the prospective customer.

Moreover, none of Melchione, Pham, or Kroenke, considered alone or in combination, describe or suggest a method that includes using the online analytical processing tool and the

customer demographic data to analyze a combination of the models wherein each model combination includes a risk model, an attrition model, and a profitability model.

Furthermore, none of Melchione, Pham, or Kroenke, considered alone or in combination, describe or suggest using an online analytical processing tool and customer demographic data to analyze a combination of models, determining a sequential order for combining the models prior to combining the models based on the model combination analysis performed by the online analytical processing tool, and using the online analytical processing tool to combine the models in the determined sequential order, which includes defining a target group of prospective customers from a plurality of prospective customers stored in a database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

More specifically, none of Melchione, Pham, or Kroenke, considered alone or in combination, describe or suggest using the online analytical processing tool to combine the models in the determined sequential order, which includes defining a target group of prospective customers from a plurality of prospective customers stored in a database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

Rather, Melchione describes a central database that receives and standardizes information for use by a financial institution in generating lists of sales leads for marketing campaigns. Melchione does not describe nor suggest using an online analytical processing tool and customer demographic data to analyze a combination of models; and Pham describes a data mining system that permits discovery, evaluation, and prediction of the correlative factors of data. In fact, the Office Action clearly states at pages 5 and 6 that "Neither Melchione nor Pham specifically disclose: using the online analytical processing tool and the customer demographic data to analyze a combination of models; determining a sequential order for combining the models prior to combining the models based on the model combination analysis performed by the online

analytical processing tool; using the online analytical processing tool to combine the models in the determined sequential order."

Applicants also submit that Kroenke is non-analogous art that is not relevant to the present patent application. More specifically, Kroenke describes a way of presenting information that is called On Line Analytical Processing (OLAP). In other words, Kroenke merely describes a way of presenting information stored within a database. Although Kroenke mentions using an OLAP for displaying information including "slices" (a dimension is held constant) data, Kroenke does not address issues related to increasing the efficiency of a marketing system. Moreover, in contrast to what is suggested by the Office Action, the "slices" of data referred to in Kroenke do not describe or teach building models of predicted customer profiles wherein each model is a statistical analysis for predicting a behavior of a prospective customer. A "slice" of data does not teach a statistical analysis for predicting a behavior of a prospective customer.

Given the obvious differences between a database processing system that presents information using On Line Analytical Processing (OLAP), and a method for increasing the efficiency of a marketing system that includes building models of predicted customer profiles including risk models, attrition models, and profitability models wherein each model is a statistical analysis for predicting behavior of a prospective customer, and the fact that the method described by Kroenke neither recognizes nor solves any of the problems addressed by the present invention, it is respectfully submitted that Kroenke is non-analogous art that would not be looked to for potential solutions in increasing efficiency of a marketing system including building models, determining a sequential order for the combining the models, and combining the models in the determined sequential order as recited in the presently pending claims.

Additionally, Applicant submits that the mere mentioning in Kroenke of using OLAP to present information stored in a database including "slices" of data with a constant dimension does not make Kroenke analogous art to a system for increasing efficiency of a marketing system. Applicants submit that merely displaying information using an OLAP does not describe or teach, nor is it analogous to increasing efficiency of a marketing system. Accordingly, as

explained below, Applicant respectfully submits that the present claims are patentable over the cited references.

In addition, even assuming, arguendo, that Kroenke is analogous art, Applicants submit that Kroenke does not describe or teach combining the models (i.e., a statistical analysis for predicting a behavior of a prospective customer) in the determined sequential order as recited in the present claims. Although the Office Action suggests that Kroenke discusses "OLAP tools, and discloses multi-dimensional slices i.e. models, organizing i.e. sequencing, the data according to a specified ranking, and combining the models into various view definitions to derive analytical conclusions", Kroenke does not describe or teach combining the models in the determined sequential order as recited in the present claims. Rather, Kroenke describes, on page 387 and in Figure 14-13, two cubes configured one behind the other displaying "slices" (i.e., dimensions that are held constant) of data. Thus, in the example shown in Kroenke, the slices of data include single family dwellings and condos. In other words, Kroenke describes a method of displaying multiple "slices" of data for a user, and does not describe or teach combining models (i.e., a statistical analysis for predicting a behavior of a prospective customer) in a determined sequential order, which includes defining a target group of prospective customers from a plurality of prospective customers stored in a database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

Applicants therefore respectfully submit that none of Melchione, Pham, or Kroenke, considered alone or in combination, describe or suggest a method for increasing efficiency of a marketing system as recited in Claim 1. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Melchione in view of Pham and further in view of Kroenke.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claim 1 be withdrawn.

Claims 2-5, and 9 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-5, and 9 are considered in combination with the recitations of Claim 1,

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Applicants submit that dependent Claims 2-5, and 9 likewise are patentable over Melchione in view of Pham and further in view of Kroenke.

Claim 10 recites a system configured for targeting market segments including "a customer database for storing a plurality of prospective customers...a graphical user interface for entering marketing campaign data...and models of predicted customer profiles based upon historic data that are embedded on an online analytical processing tool, the models include risk models, attrition models, and profitability models, each model is a statistical analysis for predicting a behavior of a prospective customer, wherein a risk model predicts a likelihood of whether the prospective customer will at least one of pay on time, be delinquent with a payment, and declare bankruptcy, an attrition model predicts a likelihood of whether the prospective customer will remain a customer or become a customer of a competitor, a profitability model predicts a net present value of the prospective customer, said online analytical processing tool configured to...analyze a combination of said models, each model combination includes a risk model, an attrition model, and a profitability model...determine a sequential order for combining said models prior to combining said models based on the model combination analysis...combine said models in the determined sequential order, wherein combining said models in the determined sequential order includes defining a target group of prospective customers from the plurality of prospective customers stored in said database, the target group including a list of prospective customers satisfying each of the combined models, the determined sequential order maximizes a number of prospective customers included within the target group...and generate scores for a prospective customer included within the target group based on said predicted customer profiles by combining said models in the determined sequential order."

None of Melchione, Pham, or Kroenke, considered alone or in combination, describe or suggest a system as recited in Claim 10. More specifically, none of Melchione, Pham, or Kroenke, considered alone or in combination, describe or suggest a system configured for targeting market segments that includes models of predicted customer profiles based upon historic data that include risk models, attrition models, and profitability models, wherein each model is a statistical analysis for predicting a behavior of a prospective customer, and wherein a

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risk model predicts a likelihood of whether the prospective customer will at least one of pay on time, be delinquent with a payment, and declare bankruptcy, an attrition model predicts a likelihood of whether the prospective customer will remain a customer or become a customer of a competitor, a profitability model predicts a net present value of the prospective customer.

Moreover, none of Melchione, Pham, or Kroenke, considered alone or in combination, describe or suggest a system that includes an online analytical processing tool configured to analyze a combination of models wherein each model combination includes a risk model, an attrition model, and a profitability model, determine a sequential order for combining the models prior to combining the models based on the model combination analysis, and combine the models in the determined sequential order, wherein combining the models in the determined sequential order includes defining a target group of prospective customers from the plurality of prospective customers stored in the database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

Furthermore, none of Melchione, Pham, or Kroenke, considered alone or in combination, describe or suggest an online analytical processing tool configured to generate scores for a prospective customer included within the target group based on the predicted customer profiles by combining the models in the determined sequential order.

Rather, Melchione describes a central database that receives and standardizes information for use by a financial institution in generating lists of sales leads for marketing campaigns. Melchione does not describe nor suggest using an online analytical processing tool and customer demographic data to analyze a combination of models; and Pham describes a data mining system that permits discovery, evaluation, and prediction of the correlative factors of data. In fact, the Office Action acknowledges at page 12 that "Neither Melchione nor Pham specifically disclose: using the online analytical processing tool and the customer demographic data to analyze a combination of models; determining a sequential order for combining the models prior to combining the models based on the model combination analysis performed by the online

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analytical processing tool; using the online analytical processing tool to combine the models in the determined sequential order."

Applicants also submit that Kroenke is non-analogous art that is not relevant to the present patent application. More specifically, Kroenke describes a way of presenting information that is called On Line Analytical Processing (OLAP). In other words, Kroenke merely describes a way of presenting information stored within a database. Although Kroenke mentions using an OLAP for displaying information including "slices" (a dimension is held constant) data, Kroenke does not address issues related to targeting market segments. Moreover, in contrast to what is suggested by the Office Action, the "slices" of data referred to in Kroenke do not describe or teach building models of predicted customer profiles wherein each model is a statistical analysis for predicting a behavior of a prospective customer. A "slice" of data does not teach a statistical analysis for predicting a behavior of a prospective customer.

Given the obvious differences between a database processing system that presents information using On Line Analytical Processing (OLAP), and a system configured for targeting market segments that includes models of predicted customer profiles based upon historic data that include risk models, attrition models, and profitability models wherein each model is a statistical analysis for predicting a behavior of a prospective customer, and the fact that the method described by Kroenke neither recognizes nor solves any of the problems addressed by the present invention, it is respectfully submitted that Kroenke is non-analogous art that would not be looked to for potential solutions in increasing efficiency of a marketing system.

Additionally, Applicant submits that the mere mentioning in Kroenke of using OLAP to present information stored in a database including "slices" of data with a constant dimension does not make Kroenke analogous art to a system for increasing efficiency of a marketing system. Applicants submit that merely displaying information using an OLAP does not describe or teach, nor is it analogous to increasing efficiency of a marketing system. Accordingly, as explained below, Applicant respectfully submits that the present claims are patentable over the cited references.

In addition, even assuming, <u>arguendo</u>, that Kroenke is analogous art, Applicants submit that Kroenke does not describe or teach combining the models (i.e., a statistical analysis for predicting a behavior of a prospective customer) in the determined sequential order as recited in the present claims. Although the Office Action suggests that Kroenke discusses "OLAP tools, and discloses multi-dimensional slices i.e. models, organizing i.e. sequencing, the data according to a specified ranking, and combining the models into various view definitions to derive analytical conclusions", Kroenke does not describe or teach combining the models in the determined sequential order as recited in the present claims. Rather, Kroenke describes, on page 387 and in Figure 14-13, two cubes configured one behind the other displaying "slices" (i.e., dimensions that are held constant) of data. Thus, in the example shown in Kroenke, the slices of data include single family dwellings and condos. In other words, Kroenke describes a method of displaying multiple "slices" of data for a user, and does not describe or teach combining models (i.e., a statistical analysis for predicting a behavior of a prospective customer) in a determined sequential order, which includes defining a target group of prospective customers from a plurality of prospective customers stored in a database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

Applicants therefore respectfully submit that none of Melchione, Pham, or Kroenke, considered alone or in combination, describe or suggest a system configured for targeting market segments as recited in Claim 10. Accordingly, Applicants respectfully submit that Claim 10 is patentable over Melchione in view of Pham and further in view of Kroenke.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claim 10 be withdrawn.

Claims 11-13, 15, and 18 depend, directly or indirectly, from independent Claim 10. When the recitations of Claims 11-13, 15, and 18 considered in combination with the recitations of Claim 10, Applicants submit that dependent Claims 11-13, 15, and 18 likewise are patentable over Melchione in view of Pham and in further view of Kroenke.

For at least the reasons set forth above, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of Claims 1-5, 9-13, 15, and 18 be withdrawn.

The rejection of Claims 6-8, 14, 16, 17, and 19-21 under 35 U.S.C. § 103(a) as being unpatentable over Melchione in view of Pham and Kroenke and in further view of Sheppard (U.S. Patent No. 6,026,397) is respectfully traversed.

Melchione, Pham, and Kroenke are all described above. Sheppard describes a system (10) for analyzing a data file that contains a plurality of data records with each data record containing a plurality of parameters. System (10) includes an input (40) for receiving the data file and a data processor (32) that has at least one of several data processing functions. These data processing functions include a segmentation function (34) for segmenting the data records into a plurality of segments based on the parameters. The data processing functions also include a clustering function (36) for clustering the data records into a plurality of clusters that contain data records having similar parameters. A prediction function (38) for predicting expected future results from the parameters in the data records may also be provided with the data processor (32).

Claims 6-8 and 20 depend from independent Claim 1. Claim 1 recites a method for increasing efficiency of a marketing system that includes a database containing a plurality of prospective customers and customer demographic data, the method includes "building models of predicted customer profiles, the models include risk models, attrition models, and profitability models, each model is a statistical analysis for predicting a behavior of a prospective customer, wherein a risk model predicts a likelihood of whether the prospective customer will at least one of pay on time, be delinquent with a payment, and declare bankruptcy, an attrition model predicts a likelihood of whether the prospective customer will remain a customer or become a customer of a competitor, a profitability model predicts a net present value of the prospective customer...embedding the models within an online analytical processing tool...using the online analytical processing tool and the customer demographic data to analyze a combination of the models, each model combination includes a risk model, an attrition model, and a profitability model...determining a sequential order for combining the models prior to combining the models

based on the model combination analysis performed by the online analytical processing tool...using the online analytical processing tool to combine the models in the determined sequential order, wherein combining the models in the determined sequential order includes defining a target group of prospective customers from the plurality of prospective customers stored in the database, the target group including a list of prospective customers satisfying each of the combined models, the determined sequential order maximizes a number of prospective customers included within the target group...and generating scores for a prospective customer included within the target group based on the predicted customer profiles wherein the online analytical processing tool generates the scores by combining the models in the determined sequential order."

None of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a method as recited in Claim 1. More specifically, none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a method for increasing efficiency of a marketing system that includes building models of predicted customer profiles including risk models, attrition models, and profitability models, wherein each model is a statistical analysis for predicting a behavior of a prospective customer, a risk model predicts a likelihood of whether the prospective customer will at least one of pay on time, be delinquent with a payment, and declare bankruptcy, an attrition model predicts a likelihood of whether the prospective customer will remain a customer or become a customer of a competitor, and a profitability model predicts a net present value of the prospective customer.

Moreover, none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a method that includes using the online analytical processing tool and the customer demographic data to analyze a combination of the models wherein each model combination includes a risk model, an attrition model, and a profitability model.

Furthermore, none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest using an online analytical processing tool and customer demographic data to analyze a combination of models, determining a sequential order for combining the models prior to combining the models based on the model combination analysis

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performed by the online analytical processing tool, and using the online analytical processing tool to combine the models in the determined sequential order, which includes defining a target group of prospective customers from a plurality of prospective customers stored in a database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

More specifically, none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest using the online analytical processing tool to combine the models in the determined sequential order, which includes defining a target group of prospective customers from a plurality of prospective customers stored in a database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

Rather, Melchione describes a central database that receives and standardizes information for use by a financial institution in generating lists of sales leads for marketing campaigns. Melchione does not describe nor suggest using an online analytical processing tool and customer demographic data to analyze a combination of models; Pham describes a data mining system that permits discovery, evaluation, and prediction of the correlative factors of data; and Sheppard describes a system for analyzing a data file that includes a data processor that has at least one of several data processing functions including a segmentation function, a clustering function, and a prediction function. In fact, the Office Action clearly states at pages 5 and 6 that "Neither Melchione nor Pham specifically disclose: using the online analytical processing tool and the customer demographic data to analyze a combination of models; determining a sequential order for combining the models prior to combining the models based on the model combination analysis performed by the online analytical processing tool; using the online analytical processing tool to combine the models in the determined sequential order."

Applicants also submit that Kroenke is non-analogous art that is not relevant to the present patent application. More specifically, Kroenke describes a way of presenting

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information that is called On Line Analytical Processing (OLAP). In other words, Kroenke merely describes a way of presenting information stored within a database. Although Kroenke mentions using an OLAP for displaying information including "slices" (a dimension is held constant) data, Kroenke does not address issues related to increasing the efficiency of a marketing system. Moreover, in contrast to what is suggested by the Office Action, the "slices" of data referred to in Kroenke do not describe or teach building models of predicted customer profiles wherein each model is a statistical analysis for predicting a behavior of a prospective customer. A "slice" of data does not teach a statistical analysis for predicting a behavior of a prospective customer.

In addition, even assuming, arguendo, that Kroenke is analogous art, Applicants submit that Kroenke does not describe or teach combining the models (i.e., a statistical analysis for predicting a behavior of a prospective customer) in the determined sequential order as recited in the present claims. Although the Office Action suggests that Kroenke discusses "OLAP tools, and discloses multi-dimensional slices i.e. models, organizing i.e. sequencing, the data according to a specified ranking, and combining the models into various view definitions to derive analytical conclusions", Kroenke does not describe or teach combining the models in the determined sequential order as recited in the present claims. Rather, Kroenke describes, on page 387 and in Figure 14-13, two cubes configured one behind the other displaying "slices" (i.e., dimensions that are held constant) of data. Thus, in the example shown in Kroenke, the slices of data include single family dwellings and condos. In other words, Kroenke describes a method of displaying multiple "slices" of data for a user, and does not describe or teach combining models (i.e., a statistical analysis for predicting a behavior of a prospective customer) in a determined sequential order, which includes defining a target group of prospective customers from a plurality of prospective customers stored in a database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

Applicants therefore respectfully submit that none of none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a method for increasing

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efficiency of a marketing system as recited in Claim 1. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Melchione in view of Pham and Kroenke and in further view of Sheppard.

When the recitations of Claims 6-8 and 20 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 6-8 and 20 likewise are patentable over Melchione in view of Pham and Kroenke and in further view of Sheppard.

Claims 14, 16, 17, and 21 depend from independent Claim 10. Claim 10 recites a system configured for targeting market segments including "a customer database for storing a plurality of prospective customers...a graphical user interface for entering marketing campaign data...and models of predicted customer profiles based upon historic data that are embedded on an online analytical processing tool, the models include risk models, attrition models, and profitability models, each model is a statistical analysis for predicting a behavior of a prospective customer, wherein a risk model predicts a likelihood of whether the prospective customer will at least one of pay on time, be delinquent with a payment, and declare bankruptcy, an attrition model predicts a likelihood of whether the prospective customer will remain a customer or become a customer of a competitor, a profitability model predicts a net present value of the prospective customer, said online analytical processing tool configured to...analyze a combination of said models, each model combination includes a risk model, an attrition model, and a profitability model...determine a sequential order for combining said models prior to combining said models based on the model combination analysis...combine said models in the determined sequential order, wherein combining said models in the determined sequential order includes defining a target group of prospective customers from the plurality of prospective customers stored in said database, the target group including a list of prospective customers satisfying each of the combined models, the determined sequential order maximizes a number of prospective customers included within the target group...and generate scores for a prospective customer included within the target group based on said predicted customer profiles by combining said models in the determined sequential order."

None of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a system as recited in Claim 10. More specifically, none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a system configured for targeting market segments that includes models of predicted customer profiles based upon historic data that include risk models, attrition models, and profitability models, wherein each model is a statistical analysis for predicting a behavior of a prospective customer, and wherein a risk model predicts a likelihood of whether the prospective customer will at least one of pay on time, be delinquent with a payment, and declare bankruptcy, an attrition model predicts a likelihood of whether the prospective customer will remain a customer or become a customer of a competitor, a profitability model predicts a net present value of the prospective customer.

Moreover, none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a system that includes an online analytical processing tool configured to analyze a combination of models wherein each model combination includes a risk model, an attrition model, and a profitability model, determine a sequential order for combining the models prior to combining the models based on the model combination analysis, and combine the models in the determined sequential order, wherein combining the models in the determined sequential order includes defining a target group of prospective customers from the plurality of prospective customers stored in the database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

Furthermore, none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest an online analytical processing tool configured to generate scores for a prospective customer included within the target group based on the predicted customer profiles by combining the models in the determined sequential order.

Rather, Melchione describes a central database that receives and standardizes information for use by a financial institution in generating lists of sales leads for marketing campaigns. Melchione does not describe nor suggest using an online analytical processing tool and customer

demographic data to analyze a combination of models; Pham describes a data mining system that permits discovery, evaluation, and prediction of the correlative factors of data; and Sheppard describes a system for analyzing a data file that includes a data processor that has at least one of several data processing functions including a segmentation function, a clustering function, and a prediction function. In fact, the Office Action acknowledges at page 12 that "Neither Melchione nor Pham specifically disclose: using the online analytical processing tool and the customer demographic data to analyze a combination of models; determining a sequential order for combining the models prior to combining the models based on the model combination analysis performed by the online analytical processing tool; using the online analytical processing tool to combine the models in the determined sequential order."

Applicants also submit that Kroenke is non-analogous art that is not relevant to the present patent application. More specifically, Kroenke describes a way of presenting information that is called On Line Analytical Processing (OLAP). In other words, Kroenke merely describes a way of presenting information stored within a database. Although Kroenke mentions using an OLAP for displaying information including "slices" (a dimension is held constant) data, Kroenke does not address issues related to targeting market segments. Moreover, in contrast to what is suggested by the Office Action, the "slices" of data referred to in Kroenke do not describe or teach building models of predicted customer profiles wherein each model is a statistical analysis for predicting a behavior of a prospective customer. A "slice" of data does not teach a statistical analysis for predicting a behavior of a prospective customer.

In addition, even assuming, arguendo, that Kroenke is analogous art, Applicants submit that Kroenke does not describe or teach combining the models (i.e., a statistical analysis for predicting a behavior of a prospective customer) in the determined sequential order as recited in the present claims. Although the Office Action suggests that Kroenke discusses "OLAP tools, and discloses multi-dimensional slices i.e. models, organizing i.e. sequencing, the data according to a specified ranking, and combining the models into various view definitions to derive analytical conclusions", Kroenke does not describe or teach combining the models in the determined sequential order as recited in the present claims. Rather, Kroenke describes, on page

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387 and in Figure 14-13, two cubes configured one behind the other displaying "slices" (i.e., dimensions that are held constant) of data. Thus, in the example shown in Kroenke, the slices of data include single family dwellings and condos. In other words, Kroenke describes a method of displaying multiple "slices" of data for a user, and does not describe or teach combining models (i.e., a statistical analysis for predicting a behavior of a prospective customer) in a determined sequential order, which includes defining a target group of prospective customers from a plurality of prospective customers stored in a database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

Applicants therefore respectfully submit that none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a system configured for targeting market segments as recited in Claim 10. Accordingly, Applicants respectfully submit that Claim 10 is patentable over Melchione in view of Pham and Kroenke and in further view of Sheppard.

When the recitations of Claims 14, 16, 17, and 21 are considered in combination with the recitations of Claim 10, Applicants submit that dependent Claims 14, 16, 17, and 21 likewise are patentable over Melchione in view of Pham and Kroenke and in further view of Sheppard.

Claim 19 recites a method for increasing efficiency of a marketing system that includes a database containing a plurality of prospective customers and customer demographic data, the method includes "building models of predicted customer profiles, the models include risk models, attrition models, profitability models, a propensity model for supplying predicted answers of a customer to marketing-related questions, a propensity model for determining a likelihood of a customer to close an account early, a propensity model for determining a likelihood of a customer to default on an account, and a client prospecting model for developing business, each model is a statistical analysis for predicting a behavior of a prospective customer, wherein a risk model predicts a likelihood of whether the prospective customer will at least one of pay on time, be delinquent with a payment, and declare bankruptcy, an attrition model predicts a likelihood of whether the prospective customer will remain a customer or become a customer

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of a competitor, a profitability model predicts a net present value of the prospective customer...embedding the models within an online analytical processing tool...utilizing the online analytical processing tool and the customer demographic data to analyze each combination of the models, each model combination includes a risk model, an attrition model, a profitability model, and a propensity model...determining a sequential order for combining the models prior to combining the models based on the model combination analysis performed by the online analytical processing tool...using the online analytical processing tool to combine the models in the determined sequential order, wherein combining the models in the determined sequential order includes defining a target group of prospective customers from the plurality of prospective customers stored in the database, the target group including a list of prospective customers satisfying each of the combined models, the determined sequential order maximizes a number of prospective customers included within the target group...generating scores for a prospective customer included within the target group based on the predicted customer profiles wherein the online analytical processing tool generates the scores by combining the models in the determined sequential order."

None of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a method as recited in Claim 19. More specifically, none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a method for increasing efficiency of a marketing system that includes a database containing a plurality of prospective customers and customer demographic data, the method includes building models of predicted customer profiles, wherein the models include risk models, attrition models, profitability models, a propensity model for supplying predicted answers of a customer to marketing-related questions, a propensity model for determining a likelihood of a customer to close an account early, a propensity model for determining a likelihood of a customer to default on an account, and a client prospecting model for developing business, wherein each model is a statistical analysis for predicting a behavior of a prospective customer, wherein a risk model predicts a likelihood of whether the prospective customer will at least one of pay on time, be delinquent with a payment, and declare bankruptcy, wherein an attrition model predicts a likelihood of whether the prospective customer will remain a customer or become a customer of

a competitor, and wherein a profitability model predicts a net present value of the prospective customer.

Moreover, none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a method for increasing efficiency of a marketing system that includes utilizing the online analytical processing tool and the customer demographic data to analyze each combination of the models, each model combination includes a risk model, an attrition model, a profitability model, and a propensity model, determining a sequential order for combining the models prior to combining the models based on the model combination analysis performed by the online analytical processing tool, and using the online analytical processing tool to combine the models in the determined sequential order, which includes defining a target group of prospective customers from the plurality of prospective customers stored in the database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

Furthermore, none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a method that includes generating scores for a prospective customer included within the target group based on the predicted customer profiles wherein the online analytical processing tool generates the scores by combining the models in the determined sequential order.

Rather, Melchione describes a sales process support system that receives and standardizes information for use by a financial institution in generating lists of sales leads for marketing campaigns; Pham describes a data mining system that permits discovery, evaluation, and prediction of the correlative factors of data; and Sheppard describes a system for analyzing a data file that includes a data processor that has at least one of several data processing functions including a segmentation function, a clustering function, and a prediction function.

Although the Office Action at page 21 suggests that Melchione discloses a propensity model for supplying predicted answers to questions, Applicants respectfully submit that

Melchione does not describe or teach a propensity model for supplying predicted answers to questions as recited in Claim 19. The Office Action suggests that Melchione discloses "a banker answering basic questions for a customer" and that it "would have been obvious to one of ordinary skill in the art to combine the Melchione's frequently asked questions with the propensity models of Sheppard". However, Claim 19 recites a propensity model for supplying predicted answers of a customer to marketing-related questions. In other words, Melchione describes a banker answering questions for a customer, while the present invention describes a propensity model for supplying predicted answers of a customer to marketing-related questions.

Applicants also submit that Kroenke is non-analogous art that is not relevant to the present patent application. More specifically, Kroenke describes a way of presenting information that is called On Line Analytical Processing (OLAP). In other words, Kroenke merely describes a way of presenting information stored within a database. Although Kroenke mentions using an OLAP for displaying information including "slices" (a dimension is held constant) data, Kroenke does not address issues related to targeting market segments. Moreover, in contrast to what is suggested by the Office Action, the "slices" of data referred to in Kroenke do not describe or teach building models of predicted customer profiles wherein each model is a statistical analysis for predicting a behavior of a prospective customer. A "slice" of data does not teach a statistical analysis for predicting a behavior of a prospective customer.

In addition, even assuming, arguendo, that Kroenke is analogous art, Applicants submit that Kroenke does not describe or teach combining the models (i.e., a statistical analysis for predicting a behavior of a prospective customer) in the determined sequential order as recited in the present claims. Although the Office Action suggests that Kroenke discusses "OLAP tools, and discloses multi-dimensional slices i.e. models, organizing i.e. sequencing, the data according to a specified ranking, and combining the models into various view definitions to derive analytical conclusions", Kroenke does not describe or teach combining the models in the determined sequential order as recited in the present claims. Rather, Kroenke describes, on page 387 and in Figure 14-13, two cubes configured one behind the other displaying "slices" (i.e., dimensions that are held constant) of data. Thus, in the example shown in Kroenke, the slices of

data include single family dwellings and condos. In other words, Kroenke describes a method of displaying multiple "slices" of data for a user, and does not describe or teach combining models (i.e., a statistical analysis for predicting a behavior of a prospective customer) in a determined sequential order, which includes defining a target group of prospective customers from a plurality of prospective customers stored in a database such that the target group includes a list of prospective customers satisfying each of the combined models and wherein the determined sequential order maximizes a number of prospective customers included within the target group.

Applicants therefore respectfully submit that none of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest a method for increasing efficiency of a marketing system as recited in Claim 19. Accordingly, Applicants respectfully submit that Claim 19 is patentable over Melchione in view of Pham and Kroenke and in further view of Sheppard.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claim 19 be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of Claims 6-8, 14, 16, 17, and 19-21 be withdrawn.

Furthermore, the rejection of Claims 1-5, 9-13, 15, and 18 under 35 U.S.C. § 103(a) as being unpatentable over Melchione in view of Pham and further in view of Kroenke; and the rejection of Claims 6-8, 14, 16, 17, and 19-21 under 35 U.S.C. § 103(a) as being unpatentable over Melchione in view of Pham and Kroenke in further view of Sheppard is further traversed on the grounds that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Melchione, Pham, Kroenke, or Sheppard, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Melchione with Pham, Kroenke, and Sheppard because there is

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no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching.
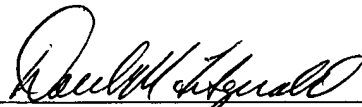
As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection appears to be based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection of Claims 1-21 be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of Claims 1-21 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

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